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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,144	12/01/2003	Christopher J. Stone	BCS03191	1770

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Motorola, Inc.
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EXAMINER	
TAYLOR, JOSHUA D	
ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
09/05/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com
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Office Action Summary	Application No.	Applicant(s)	
	10/725,144	STONE ET AL.	
	Examiner	Art Unit	
	JOSHUA TAYLOR	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 5/15/2008 have been fully considered but they are not persuasive.

Regarding applicant's arguments concerning the claim rejections under 35 U.S.C. 102: Applicant argues that Shintani fails to disclose the feature of "encoding the on-screen display at the source device as an isochronous MPEG data stream," and cites that Shintani teaches disadvantages of encoding the on-screen display at the STB in col. 2, lines 29-53.

However, examiner contends that in fact Shintani does not teach away from encoding at the STB, but rather weighs the benefits of this technique against the disadvantages, disclosing in col. 2, lines 38-45, that "before transmission, the decoded signal with OSD information *can be* encoded and compressed with a high-level MPEG-2 encoder *in the STB to reduce the transmission bandwidth*. This approach is very cost prohibitive due to the need for a high-level MPEG-2 decoder and encoder in the STB, particularly since HD digital broadcasts are in their infancy and few programs are being transmitted in the HD digital format (italics added for emphasis)." Shintani teaches that there is a tradeoff between higher cost and greater bandwidth, but explicitly states that this encoding can be done at the STB. Therefore, examiner contends Shintani teaches each and every element of claims 1-2 and 14-15.

Regarding applicant's arguments concerning the claim rejections under 35 U.S.C. 103: Applicant argues that Lownes fails to disclose the elements of independent claims 1 and 14, i.e. that "Lownes fails to supply features missing form Shintani (Remarks/Arguments, page 10, lines

9-10)." However, examiner has demonstrated that there are no features missing from Shintani, and therefore applicant's argument is moot.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 14-15 rejected under 35 U.S.C. 102(b) as being anticipated by Shintani (Pat. No.: US 6,490,002).

Regarding claims 1 and 14, Shintani discloses a method and a source device for passing an on-screen display (see column 3, lines 25-32) over a serial interface (e.g. IEEE 1394), comprising: detecting at a source device (see Figure 1, STB 100) an action (see column 6, lines 30-40) (see column 6, lines 7-10) requiring an on-screen display at a sink device (see column 6, lines 39-40) (see also column 5, lines 51-53); encoding from the STB can be extracted from the digital transport stream at the source device (via Figure 5, element 370) (see column 7, lines 26-38) as an isochronous MPEG data stream Shintani discloses the on-screen display information from the source device can be extracted from the digital transport stream. Necessarily, since the video stream is MPEG encoded, the OSD must also be MPEG encoded at the STB to decode the MPEG signal by the MPEG decoder of the HDTV (see column 7, lines 21-43) (see column 2, lines 35-40) (see column 5, lines 60-67) (see also column 6, lines 4-5); and passing said

isochronous MPEG data stream carrying said on-screen display to said sink device via said serial interface (see column 3, lines 8-12) (see also column 3, lines 25-31).

With respect to claim 14, Shintani discloses a processor adapted for detecting an action requiring an on-screen display at said sink device (see Figure 3, element 350) (see also column 6, lines 25-40), and a tuner (see Figure 1, element 210) (see column 4, lines 34-35) adapted for receiving an active isochronous MPEG data stream and graphic data for an on-screen display (see column 7, lines 36-44). Shintani discloses the on-screen display information from the source device can be extracted from the digital transport stream. Necessarily, since the video stream is MPEG encoded, the OSD must also be MPEG encoded at the STB to decode the MPEG signal by the MPEG decoder of the HDTV.

Regarding claim 2 and 15, Shintani discloses everything as claimed above (see claims 1 and 14). In addition, Shintani discloses the method and the source device, wherein: said serial interface comprises an IEEE-1394 interface (see column 4, lines 14-18).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-13 and 16-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani (Pat. No.: US 6,490,002) in view of Lownes et al. (Pat. No.: US 6,137,539).

Regarding claim 3 and 16, Shintani discloses everything as claimed above (see claims 1 and 14). In addition, Shintani discloses the method and the source device, further comprising: providing said isochronous MPEG data stream carrying said on-screen display (see column 7, lines 22-42).

However, Shintani does not disclose MPEG data stream carrying on-screen display with an associated program identifier. In an analogous art, Lownes discloses providing said isochronous MPEG data stream carrying said on-screen display (see column 5, lines 23-44) with an associated program identifier (PID) (see column 5, lines 66-67; column 6, lines 1-9); multiplexing the isochronous MPEG data stream carrying said on-screen display and said associated PID with an active isochronous MPEG data stream to provide a multiplexed transport stream (see column 5, lines 66-67; column 6, lines 1-9); and wherein said isochronous data stream carrying said on-screen display is passed to said sink device in said multiplexed transport stream (see column 4, lines 8-22).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention, to modify Shintani's invention to include an associated program identifier, multiplexing the associated PID with an active isochronous MPEG data stream to provide a multiplexed transport stream; and wherein said isochronous data stream carrying said on-screen display is passed to said sink device in said multiplexed transport stream for the predictable result of allowing a sink device such as a HDTV to more easily communicate program

information such as channel information with a source device, such as an STB, thus preventing errors which could confuse a user or programmer. By communicating PID's to the sink device from the source device, an OSD could be properly displayed as according to a viewer or user's settings.

Regarding claims 4 and 17, Shintani and Lownes disclose everything as claimed above (see claims 3 and 16). In addition, Lownes discloses the method and the source device, further comprising; modifying a program map table (see column 4, lines 33-45) of the multiplexed transport stream to point to the PID of the isochronous data stream carrying said on-screen display (see column 5, lines 23-44) rather than a PID of a video component of said active isochronous MPEG data stream (see column 5, lines 66-67; column 6, lines 1-9).

Regarding claims 5 and 18, Shintani and Lownes disclose everything as claimed above (see claims 3 and 16). In addition, Shintani discloses the method and the source device, further comprising: modifying a program map table (see column 4, lines 33-45) of the multiplexed transport stream to identify the isochronous data stream carrying the on-screen display as a secondary video source, wherein a video component of said active isochronous MPEG data stream comprises a primary video source display (see column 5, lines 51-61).

Regarding claims 6 and 19, Shintani and Lownes disclose everything as claimed above (see claims 1 and 14). In addition, Shintani discloses the method and source device wherein: the isochronous MPEG data stream carrying said on-screen display and an active isochronous MPEG data stream are provided to said serial interface as separate transport streams to be passed to said sink device; and audio/video control commands are provided to said serial interface to

enable a selection between Said active isochronous MPEG data stream and said isochronous MPEG data stream carrying said on-screen display (see column 7, lines 21-42).

Regarding claims 7 and 20, Shintani and Lownes disclose everything as claimed above (see claims 3 and 16). In addition, Shintani discloses the method and the source device, further comprising: multiplexing said isochronous MPEG data stream carrying said on-screen display with an active isochronous MPEG data stream to produce a multiplexed transport stream wherein said isochronous MPEG data stream carrying said on-screen display is substituted in place of an active video component of said active isochronous MPEG data stream (see column 5, lines 60-67; column 6, line 1); wherein said isochronous MPEG data stream carrying said on-screen display is passed to said sink device in said transport stream (see column 7, lines 21-42).

Regarding claims 8 and 21, Shintani and Lownes disclose everything as claimed above (see claim 7 and 20). In addition, Lownes the method and the source device, further comprising: maintaining a program identifier (PID) of said active video component as a PID of the isochronous MPEG data stream carrying said on-screen display (see column 7, lines 1-9).

Regarding claims 9 and 22, Shintani and Lownes disclose everything as claimed above (see claims 1 and 14). In addition, Shintani discloses the method and the source device, further comprising; receiving said isochronous MPEG data stream carrying said on-screen display at said sink device; and decoding said isochronous MPEG data stream carrying said on-screen display to provide said on-screen display (see column 7, lines 21-42).

Regarding claims 10 and 23, Shintani and Lownes disclose everything as claimed above (see claim 1). In addition, Shintani discloses the method and the source device, wherein: said

source device comprises a television terminal; and said sink device comprises a high definition television (see column 3, lines 24-32).

Regarding claims 11 and 24, Shintani and Lownes disclose everything as claimed above (see claim 1). In addition, Lownes discloses the method and the source device, wherein: said on-screen display comprises one of an electronic programming guide, a diagnostic menu, a video-on-demand menu, an advertisement, a pop-up graphic, an alert, a notice, a web page, a stock ticker, or a sports ticker (see column 5, lines 23-27).

Regarding claims 12 and 25, Shintani and Lownes disclose everything as claimed above (see claim 1). In addition, Shintani discloses the method and the source device, wherein: said action comprises one of a user driven action or a software driven action (see column 6, lines 30-40) (see Column 6, lines 7-10).

Regarding claims 13 and 26, Shintani and Lownes disclose everything as claimed above (see claim 1). In addition, the method and the source device, further comprising: detecting at said source device an action deactivating the on-screen display; disabling said passing of said isochronous MPEG data stream carrying said on-screen display to said sink device; and providing said active isochronous MPEG data stream to said sink device (see column 7, lines 17-20).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA TAYLOR whose telephone number is (571)270-3755. The examiner can normally be reached on 8am-5pm, M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Josh Taylor/

Examiner, Art Unit 2623

/Vivek Srivastava/

Supervisory Patent Examiner, Art Unit 2623